

CLAIMS

What is claimed is:

1. An apparatus for inspection and review of a substrate, the apparatus  
5 comprising:  
a first subsystem for inspecting said substrate;  
a processor for identifying regions of said substrate for review; and  
a second subsystem for reviewing at least a portion of said regions.
2. The apparatus of claim 1, wherein said first subsystem comprises an electron  
10 beam microscope.
3. The apparatus of claim 1, wherein said second subsystem comprises an  
electron beam microscope.
4. The apparatus of claim 1, wherein both said first and second subsystems each  
comprises an electron beam microscope.
- 15 5. The apparatus of claim 4, wherein said first subsystem and said second  
subsystem share one or more electron optical elements in common.
6. The apparatus of claim 5, wherein said first subsystem and said second  
subsystem share substantially all electron optical elements in common.
7. The apparatus of claim 4, wherein said portion is reviewed at a second  
20 condition differing from a first condition under which said portion is inspected.
8. The apparatus of claim 4, wherein said portion is reviewed at a second  
condition differing from a first condition under which said portion is inspected.
9. The apparatus of claim 8, wherein said first condition and said second  
condition differ from one another with regard to at least one parameter selected  
25 from the group including: true perspective; apparent perspective;  
magnification; and contrast.
10. The apparatus of claim 1, wherein said first subsystem comprises a LEEM.
11. The apparatus of claim 1, wherein said second subsystem comprises a LEEM.
12. The apparatus of claim 1, wherein both said first and second subsystems each  
30 comprises a LEEM.

13. The apparatus of claim 12, wherein said first subsystem and said second subsystem share one or more electron optical elements in common.

14. The apparatus of claim 13, wherein said first subsystem and said second subsystem share substantially all electron optical elements in common.

5 15. The apparatus of claim 12, wherein said portion is reviewed at a second condition differing from a first condition under which said portion is inspected.

16. The apparatus of claim 15, wherein said first condition and said second condition differ from one another with regard to at least one parameter selected from the group including: true perspective; apparent perspective;  
10 magnification; and contrast.

17. A method for inspection and review of a substrate, the method comprising:  
inspecting said substrate in an apparatus to generate inspection data;  
processing the inspection data to identify regions of said substrate for review;  
and

15 reviewing at least a portion of said regions in the apparatus.

18. The method of claim 17, wherein the inspecting is performed using a first subsystem of the apparatus, and wherein the reviewing is performed using a second subsystem of the apparatus.

19. The method of claim 18, wherein said portion is reviewed at a second condition  
20 differing from a first condition under which said portion is inspected.

20. The method of claim 19, wherein said first condition and said second condition differ from one another with regard to at least one parameter selected from the group including: true perspective; apparent perspective; magnification; and contrast.